



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/579,421	05/11/2006	Heimo Scheucher	AT03 0062 US1	6149
65913	7590	01/02/2008		
NXP, B.V. NXP INTELLECTUAL PROPERTY DEPARTMENT M/S41-SJ 1109 MCKAY DRIVE SAN JOSE, CA 95131			EXAMINER PAUL, DISLER	
			ART UNIT 2615	PAPER NUMBER
			NOTIFICATION DATE 01/02/2008	DELIVERY MODE ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ip.department.us@nxp.com

Office Action Summary	Application No. 10/579,421	Applicant(s) SCHEUCHER, HEIMO	
	Examiner Disler Paul	Art Unit 2615	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☒ Claim(s) 3 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>5/11/06</u> . | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Jr. (US 4,268,718) and Amtmann et al. (US 6,995,651 B2) and Sugiyama et al. (US 6,763,120 B2).

Reclaim 1, Clark, Jr. disclose of the electro-acoustic transducer having sound-generating means and having a circuit unit, which circuit unit has a circuit substrate and at least one circuit component of a signal-processing circuit, which circuit component is mounted on the circuit substrate wherein the sound-generating means and the interior space is accessible from outside the sound-generating means when the transducer is being manufactured and before the circuit unit is fitted, and wherein the at least one circuit component is arranged in the interior space in the sound-generating means and forms a communication circuit of a communication partner device for contact communication (fig.1 wt (24,34); col.2 line 50-65).

However, Clark, Jr. failed to disclose of the device means being formed a contactless communication. However, Amtmann et al. disclose of a system wherein the means being formed a contactless communication (col.1 line 30-37; col.2 line 14-20) for the purpose of providing further flexibility in case of wherein more applications arise for the integrating circuits and the transponders for the inventorizing operation. Thus, taking the combined teaching of Clark, Jr. and Amtmann et al. as a whole, it would have been more obvious for one of the ordinary skill in the art at the time of the invention to have modify Clark, Jr. by incorporating the system wherein the means being formed a contactless communication for the purpose of providing further flexibility in case of wherein more applications arise for the integrating circuits and the transponders for the inventorizing operation.

However, the combined teaching of Clark, Jr. and Amtmann et al. as a whole, fail to disclose of the sound generating being annular in form and surround an interior space. However, Sugiyama et al. disclose of a system wherein the sound generating being annular in form and surround an interior space (fig.1-2,8; col.2 line 62-67; col.7 line 30-34) for the purpose of being adapted to supports the printed board it is attached thereto. Thus, taking the combined teaching of Clark, Jr. and Amtmann et al. and Sugiyama as a whole, it would have been obvious for one of the ordinary skill in the art to have modify the

combined teaching of Clark, Jr. and Amtmann et al. as a whole, by incorporating the sound generating being annular in form and surround an interior space for the purpose of being adapted to supports the printed board it is attached thereto.

Re claim 2, the electro-acoustic transducer as claimed in claim 1, wherein only a single circuit component is provided that is formed by an integrated circuit connected to the circuit substrate which integrated circuit forms the communication circuit (fig.1 wt (24); col.2 line 50-55).

3. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Jr. (US 4,268,718) and Amtmann et al. (US 6,995,651 B2) and Sugiyama et al. (US 6,763,120 B2) and further in view of Bleim et al. (US 6,370,257 B1).

Re claim 5, the electro-acoustic transducer as claimed in claim 1, however, the combined teaching of Clark, Jr. and Amtmann et al. and Sugiyama as a whole, fail to disclose of the wherein the circuit unit is arranged to be removable without the use of a separate tool. However, Bleim et al. disclose of a system wherein the circuit unit is arranged to be removable without the use of a separate tool (col.3

line 45-50; col.8 line 1-24) for the purpose of avoiding the damage of the device during installation. Thus, taking the combined teaching of Clark, Jr. and Amtmann et al. and Sugiyama and Bleim et al. as a whole, it would have been obvious for one of the ordinary skill in the art at the time of the invention to have modify the combined teaching of Clark, Jr. and Amtmann et al. and Sugiyama as a whole, by incorporating the circuit unit is arranged to be removable without the use of a separate tool for the purpose of avoiding the damage of the device during installation.

4. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Clark, Jr. (US 4,268,718) and Amtmann et al. (US 6,995,651 B2) and Sugiyama et al. (US 6,763,120 B2) and further in view of Official Notice.

Re claim 4, the electro-acoustic transducer as claimed in claim 1, wherein the sound-generating means have a diaphragm, and wherein a pair of contact terminals each in the form of a sector of a circular annulus, are provided on a face of the circuit substrate that is remote from the diaphragm (fig.1 wt (24); col.4 line 20-38)), However, the combined teaching of Clark, Jr. and Amtmann et al. and Sugiyama as a whole, fail to disclose of the specific wherein the contact terminal are numbered in Four. However, official Notice is taken the concept of having the contact terminal being numbered in Four is simply the

inventor's preference, thus it would have been obvious for one of the ordinary skill in the art to have modify the combined teaching of Clark, Jr. and Amtmann et al. and Sugiyama as a whole, by incorporating the concept of having the contact terminal being numbered in Four for the purpose of providing a conductor of the printed circuit board for continuity.

Re claim 6, the electro-acoustic transducer as claimed in claim 1 with the housing, However, the combined teaching of Clark, Jr. and Amtmann et al. and Sugiyama as a whole, fail to disclose of the wherein the transducer has a cup-shaped housing whose height in the direction in which a transducer axis is oriented is between 2 and 5 mm and whose diameter perpendicular to the direction in which the transducer axis is oriented is between 6 and 20 mm. However, official notice is taken the concept of designing a housing wherein the transducer has a cup-shaped housing whose height in the direction in which a transducer axis is oriented is between 2 and 5 mm and whose diameter perpendicular to the direction in which the transducer axis is oriented is between 6 and 20 mm is simply the inventor's preference, thus, taking the combined teaching of Clark, Jr. and Amtmann et al. and Sugiyama as a whole, it would have been obvious for one of the ordinary skill in the art at the time of the invention to have incorporated the concept of designing a housing wherein the

transducer has a cup-shaped housing whose height in the direction in which a transducer axis is oriented is between 2 and 5 mm and whose diameter perpendicular to the direction in which the transducer axis is oriented is between 6 and 20 mm for providing better spacing to enclose the integrated circuit.

Allowable Subject Matter

5. Claim 3 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Disler Paul whose telephone number is 571-270-1187. The examiner can normally be reached on 7:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chin Vivian can be reached on 571-272-7848. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/579,421
Art Unit: 2615

Page 8

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DP


XU MEI
PRIMARY EXAMINER